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CLAIMS

1 - Process for the manufacture of sodium carbonate crystals comprising the following stages:

- 5 a) the addition of sodium carbonate to an aqueous solution comprising sodium bicarbonate and sodium carbonate, in order to form an aqueous suspension;
- 10 b) the crystallization and the separation of sodium sesquicarbonate crystals starting from the aqueous suspension, in order to obtain sesquicarbonate crystals, on the one hand, and an aqueous mother liquor, on the other hand;
- c) the crystallization and the separation of sodium carbonate crystals starting from the aqueous mother liquor,

15 characterized in that the amount of sodium carbonate added in stage a) is adjusted so that the crystallization of sesquicarbonate crystals in stage b) can be carried out without preliminary evaporation of the aqueous suspension.

2 - Process according to Claim 1, characterized in that the sodium carbonate added to the aqueous solution is solid sodium carbonate originating from the calcination of trona.

20 3 - Process according to Claim 1, characterized in that the aqueous solution comprises an aqueous extraction liquor originating from pumping into a trona deposit.

4 - Process according to Claim 1, characterized in that the amount of sodium carbonate added to the aqueous solution is such that its content of sodium carbonate is between 31 and 37% by weight.

25 5 - Process according to the preceding claim, characterized in that the amount of sodium carbonate added to the aqueous solution is such that its content of sodium carbonate is between 33 and 36% by weight.

6 - Process according to Claim 1, characterized in that the sodium sesquicarbonate separated in stage b) is subsequently calcined.

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7 - Process according to Claim 1, characterized in that sodium carbonate is added to the aqueous mother liquor resulting from stage b).

8 - Process according to Claim 1, characterized in that impurities are extracted from the aqueous mother liquor between stages b) and c), before the
5 crystallization of the sodium carbonate monohydrate.

9 - Process according to Claim 1, characterized in that a portion of the aqueous mother liquor resulting from stage c) is added to the aqueous solution during stage a).